

Amendments to the Claims

Claim Listing:

1. – 4., and 6. (Canceled)

7. (Allowed) A set of oligonucleotide probes, comprising a plurality of instances of a sequence of universal and designate nucleotides and/or nucleotide analogs ordered in a pattern, wherein the probes are displayed on a solid support and wherein

- (a) the pattern comprises a first string of universal nucleotides and/or nucleotide analogs followed by a first segment, and a second string of universal nucleotides and/or nucleotide analogs followed by a second segment,
- (b) the first string and the second string each comprise a universal nucleotide and/or nucleotide analog, and
- (c) the first segment and the second segment each comprise a designate nucleotide.

8. (Allowed) A sequencing array, comprising

a substrate, and

a set of oligonucleotide probes disposed thereon, wherein each probe comprises an instance of a pattern of universal and designate nucleotides and/or nucleotide analogs such that the set comprises a plurality of instances of the pattern, and wherein

- (a) the pattern comprises a first string of universal nucleotides and/or nucleotide analogs followed by a first segment, and a second string of universal nucleotides and/or nucleotide analogs followed by a second segment,
- (b) the first string and the second string each comprise a universal nucleotide and/or nucleotide analog, and
- (c) the first segment and the second segment each comprise a designate nucleotide.

10. (Allowed) The array of claim 8, wherein the universal nucleotides and/or nucleotide analogs are selected from the group consisting of 5- nitroindole and 3-nitropyrrole.

11. **(Allowed)** The array of claim 8, wherein each particular instance is associated with a particular location in the array.

12. **(Allowed)** The array of claim 8, wherein each probe further comprises a sequence of at least two contiguous designate nucleotides and/or nucleotide analogs bound to an end of the pattern.

20. – 22. **(Canceled)**

23. **(Allowed)** The probe of claim 20, wherein the universal and designate nucleotides and/or nucleotide analogs are linked by analogs of phosphodiester bonds.

24. **(Allowed)** The probe of claim 20, wherein the universal and designate nucleotides and/or nucleotide analogs are peptide nucleic acids.

25. **(Allowed)** An oligonucleotide probe, comprising a sequence of universal and designate nucleotides and/or nucleotide analogs ordered in a pattern, wherein the pattern comprises a root and an iterated unit, and wherein the length of the root is identical to the length of the iterated unit.

26. **(Allowed)** An oligonucleotide probe of claim 25, wherein each iterated unit comprises a string of universal nucleotides and/or nucleotide analogs followed by one or more designate nucleotide and/or nucleotide analog.

27. **(Canceled)**

28. **(Allowed)** The set of oligonucleotide probes of claim 7, wherein the designate nucleotides and/or nucleotide analogs comprise a purine or pyrimidine base, a ribose or deoxyribose sugar, and a phosphate group.

29. **(Allowed)** The array of claim 8, wherein the designate nucleotides and/or nucleotide analogs comprise a purine or pyrimidine base, a ribose or deoxyribose sugar, and a phosphate group.